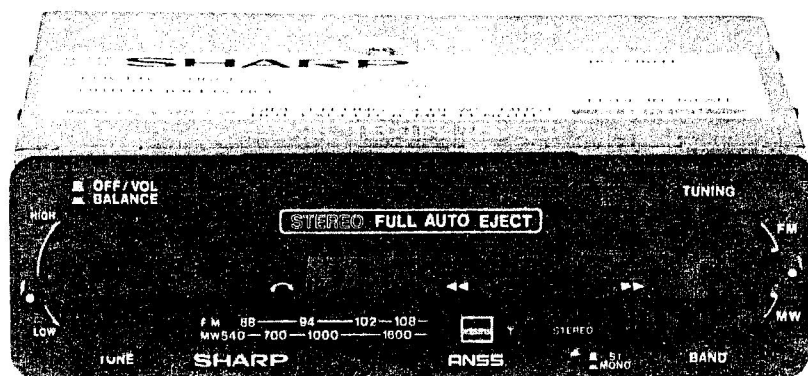




# Service Manual



## Solid State In-dash Type Cassette Car Stereo Player with MW/FM/FM Stereo Radio **MODEL RG-5801E**

"Safety regulations require that the set be restored to its original condition and that parts which are identical with those specified, be used."

### SPECIFICATIONS

#### GENERAL

Type ..... Solid State In-dash Type 4-Track 2-channel Full Auto Stop/Auto Eject Cassette Car Stereo Player with built-in MW/FM/FM STEREO 2-band Radio

Power source ..... 12 V (for negative earthing car only)

Output impedance .. 4 ohms/channel

Semiconductors .... 17-transistor (1-FET), 16-diode (1-LED) and 5-IC (integrated circuit)

Output power ..... 8 + 8 W (maximum power)  
5 W + 5 W (at 10% distortion)

S/N ..... 54 dB

Dimensions ..... 178 (W) x 130 (D) x 44 (H) mm

Weight ..... 1.2 kg

#### TAPE PLAYER SECTION

Playback system ... 4-track, 2-channel Stereo

Using tape ..... Philips standard compact cassette tape

Tape speed ..... 4.75 cm/sec.

Wow and flutter ... 0.3% (CCIR W.R.M.S.)

Frequency response . 125Hz ~ 6.3kHz/−6dB

Fast forward time .. 120 ± 30 seconds  
(@ C-60 cassette tape)

Rewind time ..... 120 ± 30 seconds  
(@ C-60 cassette tape)

Motor ..... D.C. motor with mechanical governor

#### RADIO SECTION

Frequency range.... MW 525 ~ 1,605kHz  
FM 87.6 ~ 108MHz

IF. .... MW 452kHz  
FM 10.7MHz

Sensitivity ..... MW 40μV (S/N : 20 dB)  
FM 4μV (S/N : 30 dB)

# SHARP CORPORATION OSAKA, JAPAN

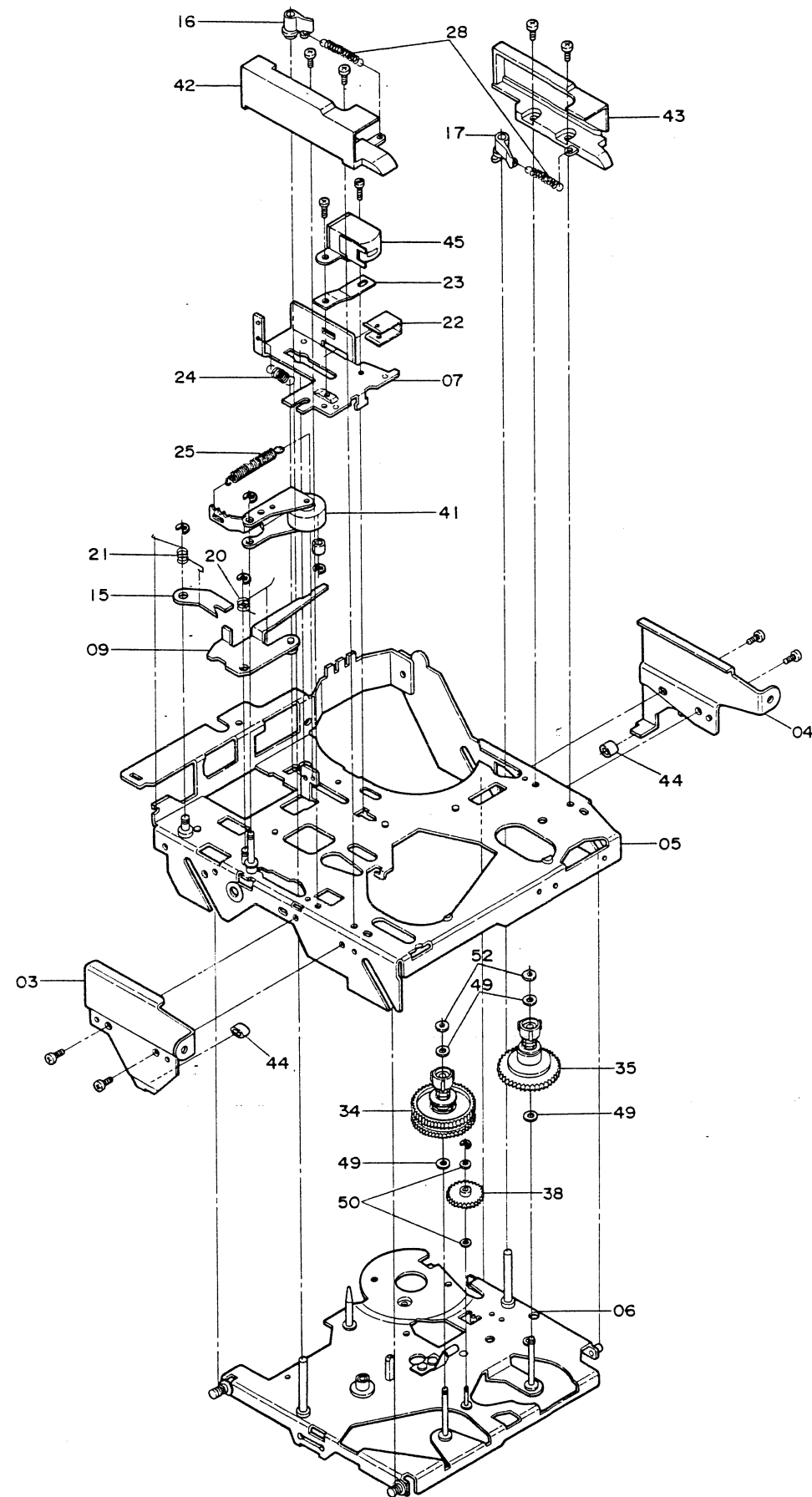


Figure 24 MECHANISM EXPLODED VIEW (UPPER SIDE)

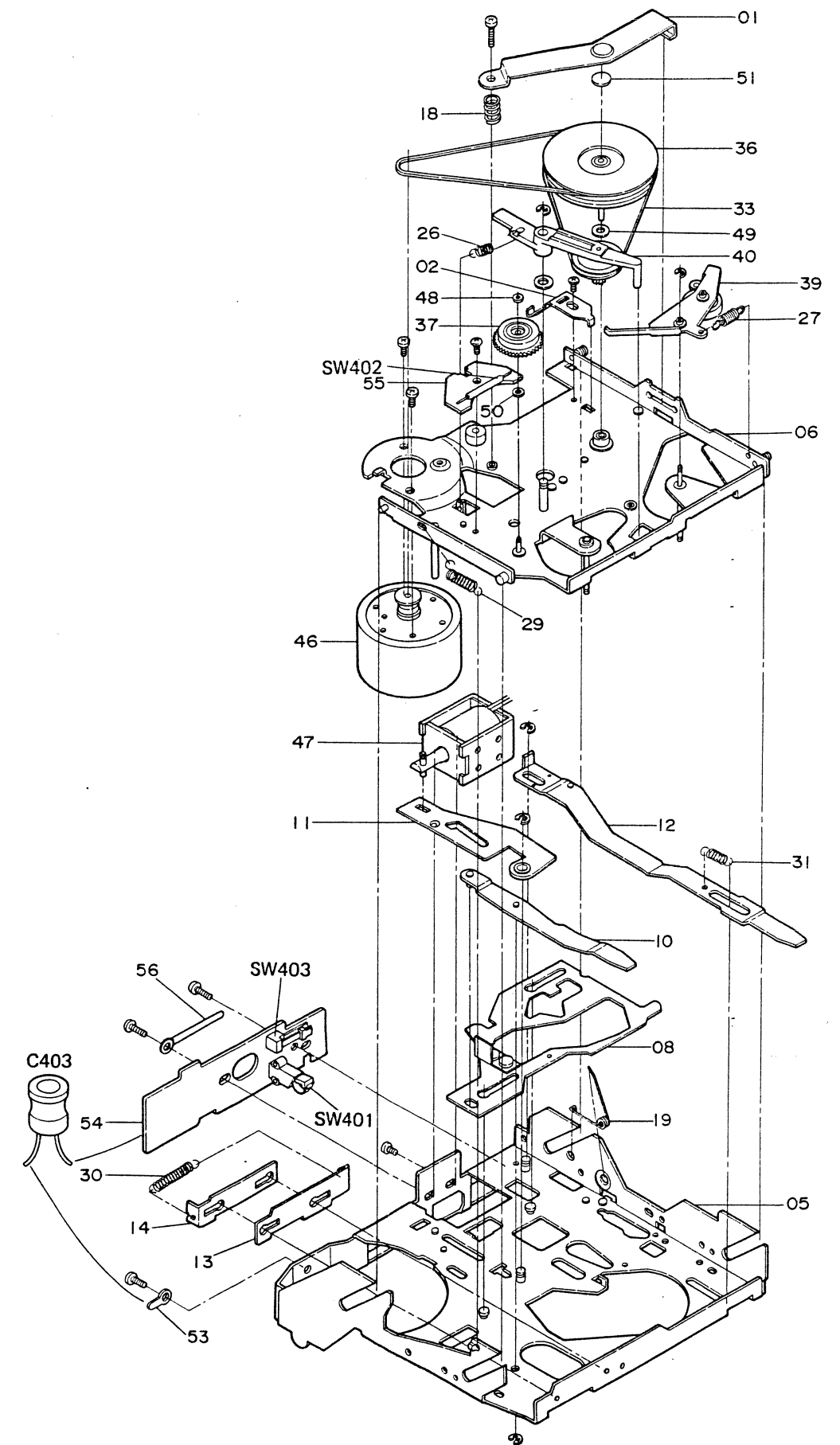


Figure 25 MECHANISM EXPLODED VIEW (LOWER SIDE)

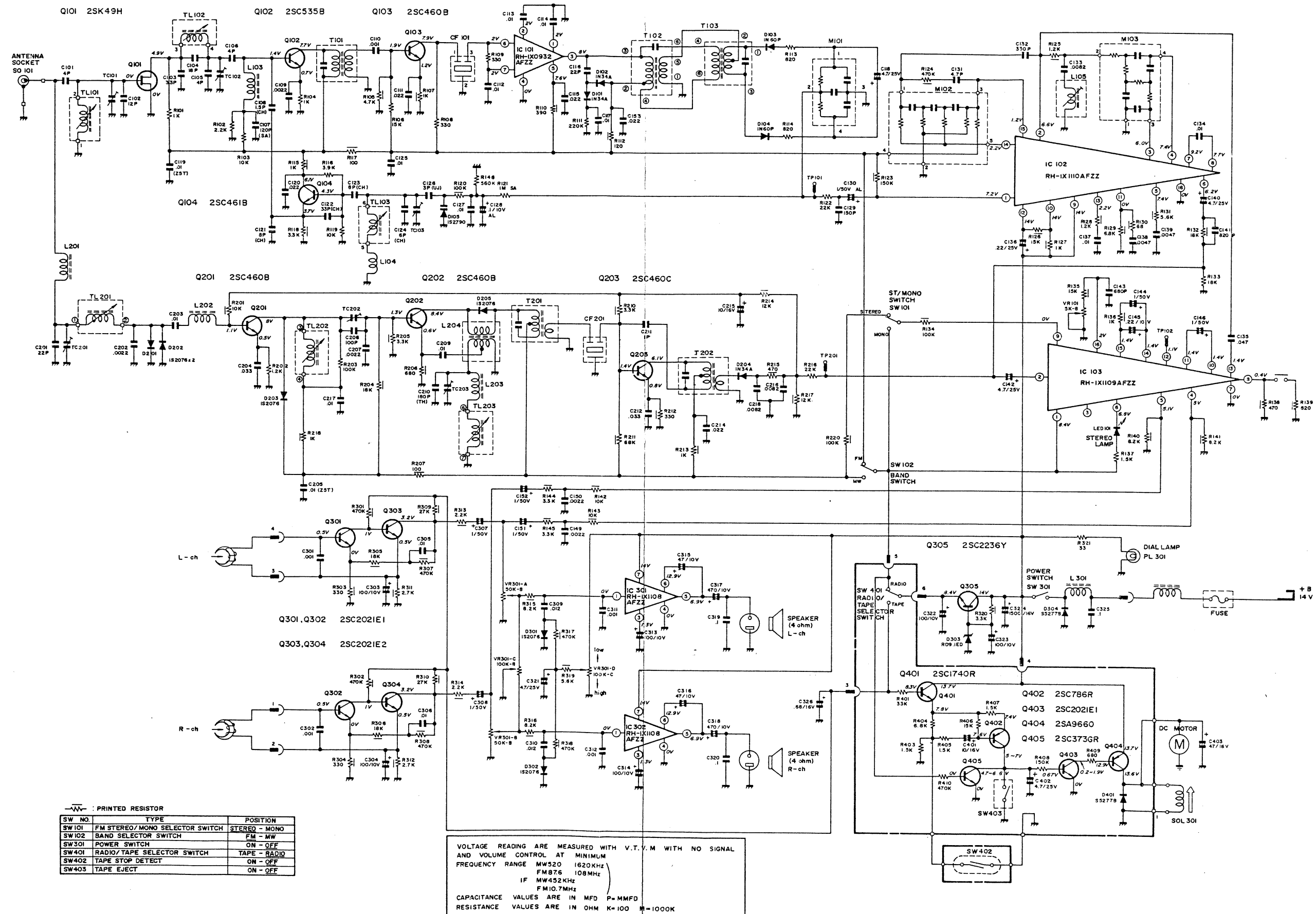


Figure 26 SCHEMATIC DIAGRAM

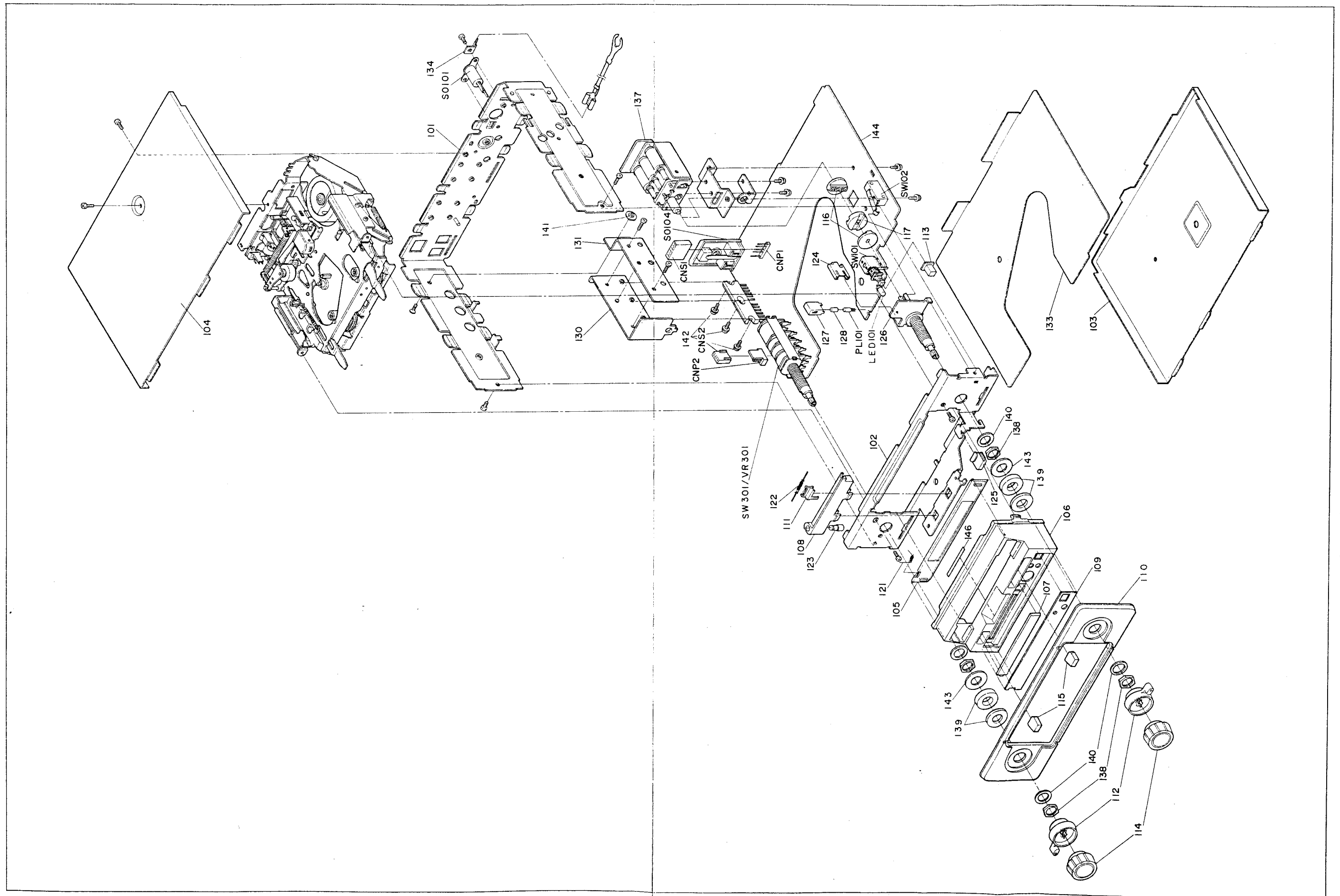


Figure 28 CABINET EXPLODED VIEW

# REPLACEMENT PARTS LIST

## "HOW TO ORDER REPLACEMENT PARTS"

To have your order filled promptly and correctly, please furnish the following informations.

1. MODEL NUMBER
2. REF. NO.
3. PART NO.
4. DESCRIPTION

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
INTEGRATED CIRCUITS				COILS			
IC101	RH-IX0932AFZZ	FM IF Amp. (BA402)	AM	L103	RCILC0067AFZZ	FM RF	**
IC102	RH-IX1110AFZZ	ANSS (HA11219)	AM	L104	RCILR0191AFZZ	FM Oscillation	AA
IC103	RH-IX1109AFZZ	PLL FM Stereo Demodulator (BA1330)	AM	L105	RCILZ0061AFZZ	Power Filter	AE
IC301	RH-IX1108AFZZ	Audio Power Amp. (μPC1182H)	AN	L201	RCILC0065AFZZ	Choke	AC
IC302	RH-IX1108AFZZ	Audio Power Amp. (μPC1182H)	AN	L202	RCILC0051AFZZ	Noise	AC
				L203	RCILC0065AFZZ	AM Oscillation	AC
				L204	RCILB0322AFZZ	AM Oscillation	AD
				L301	RCILF0067AFZZ	Choke	AD
TRANSISTORS				TRANSFORMERS			
Q101	VS2SK49-H/-1	FM RF Amp. (2SK49H)	AF	T101	RCIL10157AFZZ	FM IF	AE
Q102	VS2SC535-B/-1	FM Mixer (2SC535B)	AD	T102	RCIL10235AFZZ	FM Discriminator	AE
Q103	VS2SC460-B/-1	FM IF 1st AMP. (2SC460B)	AC	T103	RCIL10234AFZZ	FM Discriminator	AD
Q104	VS2SC461-B/-1	FM Oscillator (2SC461B)	AC	T201	RCIL10238AFZZ	AM IF	AD
Q201	VS2SC460-B/-1	AM RF AMP. (2SC460B)	AC	T201	RCIL10244AFZZ	AM IF $\Delta$ Only	AD
Q202	VS2SC460-B/-1	AM Converter (2SC460B)	AC	T202	RCIL10170AFZZ	AM IF	AD
Q203	VS2SC460-C/-1	AM IF AMP. (2SC460C)	AC				
Q301	VS2SC2021E11F	Tape Pre Amp. (2SC2021E1)	AB	FILTERS			
Q302	VS2SC2021E11F	Tape Pre Amp. (2SC2021E1)	AB	CF101	RFILF0009AFZZ	Ceramic, 10.7MHz, FM IF	AE
Q303	VS2SC2021E21F	Tape Pre Amp. (2SC2021E2)	AB	CF201	RFILA0059AFZZ	Ceramic, 452kHz, AM IF	AD
Q304	VS2SC2021E21F	Tape Pre Amp. (2SC2021E2)	AB				
Q305	VS2SC2236Y/-1	Voltage Regulator (2SC2236Y)	**				
Q401	VS2SC2021E11F	Solenoid Control (2SC2021S)	AB	PACKAGED CIRCUIT			
Q402	VS2SA786-R/-1	Solenoid Drive (2SA786R)	AC	M101	RMPTA0105AFZZ	6.8K ohm x 2 + 220PF x 3	AC
Q403	VS2SC2021E11F	Solenoid Control (2SC2021E1)	AB	M102	RMPTA0106AFZZ	2K ohm x 2 + 2.7K ohm + 22K	AF
Q404	VS2SA966-O/-1	Solenoid Drive (2SA966O)	**	M103	RMPTA0107AFZZ	4.7K ohm x 4 + 68PF + 680PF x 2 + 1200PF	AC
Q405	VS2SC2021E11F	Solenoid Control (2SC2021E1)	AB				
DIODES				CONTROLS			
D101	VHD1N34A///-1	Noise Limiter (1N34A)	AC	VR101	RVR-M0003SGZZ	5K ohm (B), VCO Frequency Adjustment	AC
D102	VHD1N34A///-1	Noise Limiter (1N34A)	AC				
D103	VHD1N60///-3	FM Detector (1N60)	AH	VR301	RVR-B0165AFZZ	Volume/Tone/Balance Control and Power Switch	AS
D104	VHD1N60///-3	FM Detector (1N60)	AH	(A-D),			
D105	VHC1S2790-Y-1	FM AFC (1S2790)	AD	SW301			
D201	VHD1S2076/-1	Protector (1S2076)	AG	TC101	RTO-H1056AFZZ	Trimmer, FM Antenna	**
D202	VHD1S2076/-1	Protector (1S2076)	AG	TC102	RTO-H1056AFZZ	Trimmer, FM RF	**
D203	VHD1S2076/-1	AM Overload (1S2076)	AG	TC103	RTO-H1057AFZZ	Trimmer, FM Oscillator	**
D204	VHD1N34A///-1	AM Detector (1N34A)	AC	TC201	RTO-A1053AFZZ	Trimmer, AM Antenna	AD
D205	VHD1S2076/-1	AM Converter (1S2076)	AG	TC202	RTO-H1019AGZZ	Trimmer, AM RF	AD
D301	VHD1S2076/-1	TONE (1S2076)	AG	TC203	RTO-A1052AFZZ	Trimmer, AM Oscillator	AD
D302	VHD1S2076/-1	TONE (1S2076)	AC				
D303	VHERD9.1ED/-1	Zener (Voltage Regulator) (RD9.1ED)	AC	CAPACITORS			
D304	VHDS5277B/-1	Protector (S5277B)	AB	C101	VCCSPU1HL4R0C	4PF, 50V, $\pm 0.25$ PF, Ceramic	AA
D401	VHDS5277B/-1	Protector (S5277B)	AB				
LED101	VHPGL-5PR5/1F	Stereo indicator (GL-5PR5)	AD				

\*\* ; Price will be quoted upon receipt of order.

# PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
C102	VCCSPU1HL120J	12PF, 50V, $\pm 5\%$ , Ceramic	AA	C325	VCKZPU1HF104Z	.1MFD, 50V, $\pm 80 - 20\%$ , Ceramic	AC
C103	VCCSPU1HL330J	33PF, 50V, $\pm 5\%$ , Ceramic	AA	ELECTROLYTIC CAPACITORS			
C104	VCCSPU1HL180J	18PF, 50V, $\pm 5\%$ , Ceramic	AA	C118	VCEAAU1EW475A	4.7MFD, 25V, $\pm 75 - 10\%$	AB
C105	VCCSPU1HL4R0C	4PF, 50V, $\pm 0.25$ PF, Ceramic	AA	C128	VCAAAU1AB104M	.1MFD, 10V, $\pm 20\%$	AC
C106	VCCSPU1HL4R0C	4PF, 50V, $\pm 0.25$ PF, Ceramic	AA	C130	VCEALU1HW105M	1MFD, 50V, $\pm 20\%$	AD
C107	VCRYPU1HB121J	120PF, 50V, $\pm 5\%$ , Ceramic	AA	C136	VCAAAU1EB224K	.22MFD, 25V, $\pm 10\%$	AC
C108	VCCCPU1HH1R5C	1.5PF, 50V, $\pm 0.25$ PF, Ceramic	AA	C140	VCEAAU1EW475A	4.7MFD, 25V, $\pm 75 - 10\%$	AB
C109	VCTYPU1EX222M	.0022MFD, 25V, $\pm 20\%$ , Ceramic	AA	C142	VCEAAU1EW475A	4.7MFD, 25V, $\pm 75 - 10\%$	AB
C110	VCQYKU1HM102M	.001MFD, 50V, $\pm 20\%$ , Mylar	AC	C144	VCEAAU1HW105A	1MFD, 50V, $\pm 10\%$	AB
C111	VCQYKU1HM223M	.022MFD, 50V, $\pm 20\%$ , Mylar	AB	C145	VCAAAU1AB224M	.22MFD, 10V, $\pm 20\%$	AC
C112	VCTYPU1EX103M	.01MFD, 25V, $\pm 20\%$ , Ceramic	AA	C146	VCEAAU1HW105A	1MFD, 50V, $\pm 75 - 10\%$	AB
C113	VCTYPU1EX103M	.01MFD, 25V, $\pm 20\%$ , Ceramic	AA	C151	VCEAAU1HW105A	1MFD, 50V, $\pm 75 - 10\%$	AB
C114	VCTYPU1EX103M	.01MFD, 25V, $\pm 20\%$ , Ceramic	AA	C152	VCEAAU1HW105A	1MFD, 50V, $\pm 75 - 10\%$	AB
C115	VCTYPU1EX223M	.022MFD, 25V, $\pm 20\%$ , Ceramic	AA	C215	VCEAAU1CW106Y	10MFD, 16V, $\pm 50 - 10\%$	AB
C116	VCCSPU1HL220J	22PF, 50V, $\pm 5\%$ Ceramic	AA	C303	RC-EZS107AF1A	100MFD, 10V, $\pm 30 - 10\%$	AB
C117	VCTYPU1EX103M	.01MFD, 25V, $\pm 5\%$ Ceramic	**	C304	RC-EZS107AF1A	100MFD, 10V, $\pm 30 - 10\%$	AB
C119	VCKYPU1SD103Z	.01MFD, 30V, $\pm 80 - 20\%$ , Ceramic	AA	C307	VCEAAU1HW105A	1MFD, 50V, $\pm 75 - 10\%$	AB
C120	VCTYPU1EX223M	.022MFD, 25V, $\pm 20\%$ , Ceramic	AA	C308	VCEAAU1HW105A	1MFD, 50V, $\pm 75 - 10\%$	AB
C121	VCCCPU1HH8R0D	8PF, 50V, $\pm 0.5$ PF, Ceramic	AB	C313	RC-EZS107AF1A	100MFD, 10V, $\pm 30 - 10\%$	AB
C122	VCCCPU1HH330J	33PF, 50V, $\pm 5\%$ , Ceramic	AB	C314	RC-EZS107AF1A	100MFD, 10V, $\pm 30 - 10\%$	AB
C123	VCCCPU1HH8R0D	8PF, 50V, $\pm 0.5$ PF, Ceramic	AB	C315	RC-EZS476AF1A	47MFD, 10V, $\pm 30 - 10\%$	AB
C124	VCCRPUIHH6R0C	6PF, 50V, $\pm 0.25$ PF, Ceramic	AA	C316	RC-EZS476AF1A	47MFD, 10V, $\pm 30 - 10\%$	AB
C125	VCTYPU1EX103M	.01MFD, 25V, $\pm 20\%$ , Ceramic	AA	C317	RC-EZS477AF1A	470MFD, 10V, $\pm 30 - 10\%$	AC
C126	VCCUPUIHJ3R0C	3PF, 50V, $\pm 0.25$ PF, Ceramic	AB	C318	RC-EZS477AF1A	470MFD, 10V, $\pm 30 - 10\%$	AC
C127	VCTYAT1EX103N	.01MFD, 25V, $\pm 30\%$ , Ceramic	AA	C321	VCEAAU1EW475A	4.7MFD, 25V, $\pm 75 - 10\%$	AB
C129	VCCSPU1HL151J	150PF, 50V, $\pm 5\%$ , Ceramic	AA	C322	RC-EZS107AF1A	100MFD, 10V, $\pm 30 - 10\%$	AB
C131	VCCSAT1HL4R7C	4.7PF, 50V, $\pm 0.25$ PF, Ceramic	**	C323	RC-EZS107AF1A	100MFD, 10V, $\pm 30 - 10\%$	AB
C132	VCKYAT1HB331K	330PF, 50V, $\pm 10\%$ , Ceramic	**	C324	RC-EZ1075AFZZ	1500MFD, 16V, $\pm 50 - 10\%$	AE
C133	VCTYAT1EX822N	.0082MFD, 25V, $\pm 30\%$ , Ceramic	**	C326	VCAAAU1CF684M	.68MFD, 16V, $\pm 20\%$	**
C134	VCTYPU1EX103M	.01MFD, 25V, $\pm 20\%$ , Ceramic	AA	C401	VCEAAU1CW106Y	10MFD, 16V, $\pm 50 - 10\%$	AB
C135	VCTYPU1EX473M	.047MFD, 25V, $\pm 20\%$ , Ceramic	AA	C402	VCEAAU1EW475A	4.7MFD, 25V, $\pm 75 - 10\%$	AB
C137	VCTYAT1EX103N	.01MFD, 25V, $\pm 30\%$ , Ceramic	AA	C403	RC-EZS476AF1C	47MFD, 16V, $\pm 30 - 10\%$	AB
C138	VCTYAT1EX472N	.047MFD, 25V, $\pm 30\%$ , Ceramic	AA				
C139	VCTYAT1EX472N	.047MFD, 25V, $\pm 30\%$ , Ceramic	AA	RESISTORS			
C141	VCKYAT1HB821K	820PF, 50V, $\pm 10\%$ , Ceramic	AB	(Unless otherwise specified resistors are 1/4W, $\pm 5\%$ , Carbon type.)			
C143	VQSMU1HS681J	680PF, 50V, $\pm 5\%$ , Ceramic	AB	R101	VRD-SU2EE102J	1K ohm	AA
C149	VCQYKU1HM222K	.0022MFD, 50V, $\pm 10\%$ , Ceramic	AB	R102	VRD-SU2EE222J	2.2K ohm	AA
C150	VCQYKU1HM222K	.0022MFD, 50V, $\pm 10\%$ , Ceramic	AB	R103	VRD-SU2EE103J	10K ohm	AA
C153	VCTYPU1EX223M	.022MFD, 25V, $\pm 20\%$ , Ceramic	AA	R104	VRD-SU2EE102J	1K ohm	AA
C201	VCCSPU1HL220J	22PF, 50V, $\pm 5\%$ , Ceramic	AA	R106	VRD-SU2EE153J	15K ohm	AA
C202	VCQYKU1HM222M	50V, Mylar	AA	R108	VRD-SU2EE331J	330 ohm	AA
C203	VCQYKU1HM103M	.01MFD, 50V, $\pm 20\%$ , Mylar	AB	R109	VRD-SU2EE331J	330 ohm	AA
C204	VCTYPU1EX333M	.033MFD, 25V, $\pm 20\%$ , Ceramic	AB	R111	VRD-SU2EE224J	220K ohm	AA
C205	VCKYPU1SD103Z	.01MFD, 30V, $\pm 80 - 20\%$ , Ceramic	AA	R113	VRD-SU2EE821J	820 ohm	AA
C206	VCCSAT1HL101J	100PF, 50V, $\pm 5\%$ , Ceramic	**	R114	VRD-SU2EE821J	820 ohm	AA
C207	VCQYKU1HM222M	.0022MFD, 50V, $\pm 20\%$ , Mylar	AB	R116	VRD-SU2EE392J	3.9K ohm	AA
C209	VCQYKU1HM103M	.01MFD, 50V, $\pm 20\%$ , Mylar	AB	R119	VRD-SU2EE103J	10K ohm	AA
C210	VCCTPU1HH181J	180PF, 50V, $\pm 5\%$ , Ceramic	AB	R121	VRD-ST2EE105J	1M ohm	AA
C211	VCCSPU1HL1R0C	1PF, 50V, $\pm 0.25$ PF, Ceramic	AB	R122	VRD-SU2EE223J	220K ohm	AA
C212	VCQYKU1HM333M	.033MFD, 50V, $\pm 20\%$ , Mylar	AB	R137	VRD-ST2EE152J	1.5K ohm	AA
C214	VCQYKU1HM223M	.022MFD, 50V, $\pm 20\%$ , Mylar	AB	R148	VRD-ST2EE564J	560K ohm	AA
C216	VCQYKU1HM822M	.0082MFD, 50V, $\pm 20\%$ , Mylar	AB	R148	VRD-SU2EE564J	560K ohm	AA
C217	VCTYPU1EX103M	.01MFD, 25V, $\pm 20\%$ , Ceramic	AA	R202	VRD-SU2EE122J	1.2K ohm $\Delta$ Only	AA
C218	VCQYKU1HM822M	.0082MFD, 50V, $\pm 20\%$ , Mylar	AB	R202	VRD-SU2EE152J	1.5K ohm	AA
C301	VCQYKU1HM102J	.001MFD, 50V, $\pm 5\%$ , Mylar	AC	R203	VRD-SU2EE104J	100K ohm	AA
C302	VCQYKU1HM102J	.001MFD, 50V, $\pm 5\%$ , Mylar	AC	R216	VRD-ST2EE223J	22K ohm	AA
C305	VCQYKU1HM103J	.01MFD, 50V, $\pm 5\%$ , Mylar	AB	R321	VRD-ST2EE331J	330 ohm	AA
C306	VCQYKU1HM103J	.01MFD, 50V, $\pm 5\%$ , Mylar	AB	R401	VRD-SU2EE333J	33K ohm,	AA
C309	VCQYKU1HM123M	.012MFD, 50V, $\pm 20\%$ , Mylar	AB	R403	VRD-SU2EE152J	1.5K ohm,	AA
C310	VCQYKU1HM123M	.012MFD, 50V, $\pm 20\%$ , Mylar	AB	R404	VRD-SU2EE682J	6.8K ohm,	AA
C311	VCQYKU1HM102M	.001MFD, 50V, $\pm 20\%$ , Mylar	AB	R405	VRD-SU2EE152J	1.5K ohm,	AA
C312	VCQYKU1HM102M	.001MFD, 50V, $\pm 20\%$ , Mylar	AB	R406	VRD-SU2EE153J	15K ohm,	AA
C319	VCQYKU1HM104M	.1MFD, 50V, $\pm 20\%$ , Mylar	AC	R407	VRD-SU2EE152J	1.5K ohm,	AA
C320	VCQYKU1HM104M	.1MFD, 50V, $\pm 20\%$ , Mylar	AC	R408	VRD-ST2EE154J	150K ohm,	AA
				R409	VRD-ST2EE152J	1.5K ohm,	AA

# PARTS LIST

[illegible]

# PARTS LIST

REF. NO.	PART NO.	DESCRIPTION	CODE	REF. NO.	PART NO.	DESCRIPTION	CODE
	XWHSD50-05000	Washer, $\phi 5$	AA	SW102	QSW-S0226AFZZ	Switch, Band Selector	AE
CNP1	QCNCM0503SGZZ	Connector, 5 pin	AD	SW401	QSW-F0126AFZZ	Switch, Radio/Tape Selector	AE
CNP2	QCNCM233DAFZZ	Connector, 4 pin		SW402	QSW-L0054AFZZ	Switch, Tape Stop Detect	AE
CNS1	QCNW-0376AFZZ	Wiring Wires with Connector (5 pin)	AF	SW403	QSW-F0127AFZZ	Switch, Tape Eject	AD
CNS2	QCNW-0340AFZZ	Wiring Wires with Connector (4 pin)	**	PL101	RLMPM0069AFZZ	Lamp, Dial	AD
	QCNW-0342AFZZ	Speaker Cord, 3.5m	AN	SO101	QSOCZ0015AFZZ	Antenna Socket	AD
	QCNW-0322AFZZ	Earth Cord	AC	SO104	QSOC0271AFZZ	Speaker Socket	AG
	QFS-A232BAFNH	Fuse	AC		SPAKA0520AFZZ	Packing Add	**
	QFSHJ1058AFZZ	Fuse Holder with Coil	AM		SPAKC1152AFZZ	Packing Case	**
SW101	QSW-P1074AFZZ	Switch, FM Stereo/Mono Selector	AF		TINSE0561AFZZ	Operation Manual	**
					TTAG-0066AFZZ	Tag, ANSS	**
					SSAKH0097AFZZ	Polyethylene Bag, Set	AA